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(54) Title: METHODS OF EVALUATING EFFICACY OF AN IMMUNE RESPONSE BY ASSESSING ALPHA-1 INTEGRIN EXPRESSION

(57) Abstract: Disclosed are methods for evaluating efficacy of an immune response by assessing alpha-1 integrin, screening for, and manufacturing those therapeutic agents. Described herein the presence of VLA-1+ (positive) T cells indicates an effective immune response. Also disclosed are methods of screening for antigens that induce the production of VLA-1+ (positive) T cells, methods of isolating the antigens, and methods using the antigens identified in the screening methods to treat a subject with a disease.